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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,950	10/27/2003	Kentaro Fujino	244405US0X	2139

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EXAMINER	
KNABLE, GEOFFREY L	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,950	FUJINO ET AL.	
	Examiner	Art Unit	
	Geoffrey L. Knable	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *11 and 12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/27/03;3/4/04;4/24/06;12/6/04*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's election with traverse of species A in the reply filed on 4-24-2006 is acknowledged. The apparent traversal is on the ground(s) that should the elected species be found allowable, the office should expand the search to the non-elected species. This is not found persuasive because while it would be agreed that if a generic claim is found allowable, the search would have been expanded and rejoinder would be considered if appropriate for any claims that depend from or otherwise require all the limitations of an allowable generic claim, if only claims to the elected species are found allowable, then the search would not be expanded to non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 11 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4-24-2006.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,292,590) taken in view of WO 2002/092643 to Ikeda et al.

Lin et al. discloses an innerliner and tire with this innerliner formed from an ethylene vinyl alcohol copolymer that preferably contains less than 50% ethylene content and is more than 90% saponified (esp. col. 2, lines 53-63). Modification with an epoxy compound as claimed is not however taught.

WO 2002/092643 (corresponding US 2004/0096683, although itself not available as prior art, has been used as the translation for WO '643, the following rejection referring to portions of this publication) discloses a modified ethylene vinyl alcohol that is modified in apparently the same manner as that claimed (note esp. paragraphs [0070]-[0071] of the corresponding US '683) in order to provide an EVOH copolymer for barrier applications with improved properties including flexibility and flex resistance. In light of these teachings, it is considered to have been obvious to replace the unmodified EVOH in Lin et al. with a modified EVOH as taught by WO '943 with an expectation of providing improved liner flex properties. An innerliner and tire as required by claims 1-5 and 15 is therefore considered to have been obvious. As to claims 6-8, 13, 14, 16 and 17, Lin et al. discloses use of auxiliary layers (that can be different - note col. 5, lines 5-8) as well as adhesives (col. 4, lines 6-8) and thicknesses (e.g. col. 8, lines 28-30)

consistent with those claimed. As to claims 9-10, Lin et al. indicates that any conventional rubber can be used for the auxiliary layer (esp. col. 5, lines 3-19), it being considered to have been obvious to use butyl or halobutyl given the well known and well recognized fact that such materials have desirable low permeability while having known bonding capability to the carcass (being that such represents the standard and typical tire innerliner rubbers).

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 5,292,590) taken in view of WO 2002/092643 to Ikeda et al. as applied above, and further in view of at least one of [Liu et al. (US 5,280,817) and Weston et al. (US 5,879,488)].

Locally thickening a portion of the liner relative to a portions under the belt would have been obvious in light of Liu et al. and Weston et al. which each suggest thickening part of the barrier layer adjacent the shoulders, it being noted that Liu et al. even includes the thickened layer in a barrier layer (37) between another part of the innerliner and the carcass, i.e. analogous to the auxiliary layers in Lin et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
July 10, 2006